

American Bee Journal

45th Year.

CHICAGO, ILL., JAN. 12, 1905.

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WEEKLY



AN OUT-APPIARY OF H. G. ACKLIN, IN HENNEPIN CO., MINN.
(See page 20.)

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THE A. I. ROOT COMPANY,
FACTORY AND EXECUTIVE OFFICE,
MEDINA, OHIO.

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GEORGE W. YORK, Editor.

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Editorial Notes and Comments

Getting People to Use More Honey.

This is a subject that should interest every producer of honey. We would like to invite those who have had successful experience along this line, to tell about it. Something should be done to get more people to consume more honey. We have often said that we believed that honey should become a daily food—on every table in the land. It is not so now. We believe if the facts were known, but a very small percent of the American families ever use any honey. And why? We believe it is because so few people know the real value of honey as a food.

Quite a number of people seem to think that honey is good only for a cold—to be taken simply as a medicine! This is a great mistake. Not that honey is not a good remedy for certain physical ailments, but it is a mistake not to use it more regularly as a food. It should take the place, to a larger extent, of sugar, or even certain spreads for bread.

It seems to us that here is a field for some of the best thought that can be brought to bear on it. Why is not more honey used by the ordinary families of to-day? What can be done by bee-keepers to induce them to use it more than they do?

Shaken Swarms 39 Years Ago.

The Canadian Bee Journal reprints an article by George W. House, which appeared in the Bee-Keepers' Magazine for May, 1880. It gives the *modus operandi* for shaking swarms, which, Mr. House said, they had been practicing for 15 years. That would make the plan at least 39 years old. "There is no new thing under the sun."

Baby Nuclei for Fertilizing Queens.

Opinions differ as to the feasibility of fertilizing queens with the very small number of bees used in the so-called baby nuclei; but, on the whole, they seem to be gaining in favor. Some think they may be used by professional queen-breeders, but not by the rank and file of honey-producers. There is no reason why the honey-producer, with only a dozen colonies, should not use baby nuclei as well as the man who rears queens for a living, if he is willing to be at the expense of procuring the proper paraphernalia.

Yet, at the Chicago convention, Dr. Miller urged that

these miniature colonies could be used for fertilizing queens—as they had been used by himself—without anything other than the ordinary hives in use, and a few one-tier wide-frames to hold one section each.

The question has been raised whether, in ordinary hands, these baby nuclei would succeed in the cooler portions of the country, early or late in the season. In ordinary hands—indeed, in the most skillful hands—there is likely to be trouble in getting virgins fertilized at any time out of the honey season, even with strong nuclei, and with the honey-producer there is little necessity for it. The experiment can easily be tried by any one, even if he uses only cells obtained from colonies that have swarmed.

Best Reading-Time Right Now.

No doubt during the busy summer-time many a bee-keeper finds little time or inclination to read his bee-papers or bee-books. He is then rushed with either bee-work or other employment. So the time to read, for many, is during the long winter evenings and perhaps on stormy days.

Fortunate indeed is he who has saved all his bee-papers as they came during the busy season, for now he can simply revel in them, and lay up a store of apicultural information that will help make greater his success with the bees next season.

And the bee-books! Every bee-keeper should have one or more of the best. In any of the complete books will be found answers to a thousand and one questions that every bee-keeper needs to be familiar with in order to attain the largest success.

It pays to become familiar with the experiences and methods of others in the same line of business. Such knowledge may save much useless effort, and often loss, to the one who reads extensively, and is wise in his selections.

Treatment of Bee-Stings.

Considerable space is taken up with the matter of bee-stings in the Alkaloidal Clinic for November. Not so many remedies are given as may be found in bee-papers, but enough to show that in the medical profession, as well as among the laity, there is a wide diversity of opinion; and possibly those are near the mark who think that no remedy has any efficacy except as a placebo. It appears that in medical text-books salt is given as one remedy for stings, sweet oil as another, also onions. One correspondent advises "to try *Apis mellifica*, say 3x or even 6x". Dr. W. H. Barnett believes in prophylactic treatment, and says:

"I am satisfied that ecthol, a combination of echinacea and thuja, will prevent the sting of bees from hurting him."

Let him take dram doses every hour for three hours before he commences to work with them. The reason for the faith that is in me is this: They used to hurt me. Last summer I was taking it for a skin disease, and while under its influence I was stung by a wasp on the face and neck. When stung I started to the house to get something to stop the pain and swelling that I expected to suffer with, but instead of pain and swelling as heretofore when stung, there was no more of either than a mosquito or a gnat would have caused."

For the bee-keeper whose time is taken up entirely with bees, working at them as long as he can see in the evening, and going at it again about as soon as he is out of bed, it would not be very convenient to take his dose three hours in advance of work and hourly afterward; although an alarm clock might help out if he had the trick of promptly falling to sleep again. Yet such treatment, if entirely reliable, might be warmly welcomed by some amateurs upon whom the effect of a single sting is severe.

Bee-stings for rheumatism and Bright's disease come in for mention, one man saying: "I do not remember a single person who has kept bees that has been bothered with this troublesome disease". Which merely goes to show that his sphere of observation has been very limited.

The editor is sufficiently up-to-date to say that the poison of the bee is something essentially different from formic acid.

Right in line with the foregoing is the following "scientific note" sent us as a clipping by Dr. Peiro, whom quite a number of our readers know both by reputation and also personally:

"Investigation of the poison of bees has shown M. Phisalix three distinct active principles, one of which produces inflammation and the second causes convulsion, while the third stupefies. The poison is secreted by two glands, the acid one yielding the stupefying and inflammatory substances, and the alkaline one the substance causing convulsions. The observations included the poisoning of a sparrow by the stings of two or three bees. The bird showed weakening within five minutes, then progressive increase of the partial paralysis, which, at last, became a mere trembling, interrupted by periods of somnolence. Death came in two or three hours."



Miscellaneous News & Items

General Manager France, of Wisconsin, called on us last week when passing through Chicago on his way to New York State, where he will speak on bees and bee-diseases at farmers' institutes and bee-keepers' conventions during much of the time this month. It will be a treat for New York bee-keepers to hear Mr. France.

Luna W. Elmore, of Jefferson Co., Iowa, when sending his renewal subscription dollar for 1905, added these appreciative words:

"I can't get along without a good bee-paper like the American Bee Journal. All bee-keepers should read every copy. If one has only one colony of bees, a good bee-paper will help him to give that one colony the proper care."

A Six-Foot Swarm.—George Hodges, of Allegany Co., N. Y., sends us the following which originally appeared in the Friendship Register last summer:

Mr. John Todd, who has a large apiary of nearly 150 colonies of bees, reported an unusual sight Tuesday of several colonies of bees that had swarmed and hung to a limb, one swarm after another caught on until the string of bees was nearly six feet long, and so heavy the limb finally

broke with them. He said if they could have been photographed it would have made a great picture.

Mr. Hodges then added that he had had the same thing himself many times when the weather was warm.

A Queen-Bee Free as a Premium.—We are now booking orders for untested Italian queens to be delivered in May or June. This is the premium offer: To a subscriber whose own subscription to the American Bee Journal is paid at least to the end of 1905, we will give an untested Italian queen for sending us one new subscription with \$1.00 for the Bee Journal a year. Now is a good time to get new subscribers. If you wish extra copies of the Bee Journal for use as samples, let us know how many you want and we will mail them to you. Address all orders to the office of the American Bee Journal.

"The Fort Snelling Apiary" is the name of the bee-yard shown on the front page this week. It is located on the north shore of the Mississippi River, nearly opposite where the Minnesota River empties into the Mississippi River, and near Fort Snelling. It is a beautiful place, and Mr. and Mrs. Acklin have often entertained their friends at luncheon at this apiary. The honey-house and Mr. Acklin are shown in the picture. This apiary is run mostly for extracted honey. Three nucleus hives are shown, but more nucleus hives, colonies, and a bee-cave are to the right and not shown in the picture.

A Bee and Red Clover Calendar for 1905 has been received at this office from Mr. W. F. Marks, of New York, the chairman of the Board of Directors of the National Bee-Keepers' Association. The outside dimensions of the cardboard are 6 1/4 x 10 1/4. The illustration, 5x6 inches, shows a large honey-bee and six red clover heads. This latter is pasted near the top of the card, and the calendar below it. At the upper left-hand corner are shown several white embossed bees on a gold background. Altogether it is a very attractive calendar, and should be in every bee-keeper's home. Perhaps Mr. Marks will offer them for sale.



Opinions of Some Experts

Producing Marketable Comb Honey Without Separators.

20.—Can marketable sections of honey be satisfactorily produced without separators?

EUGENE SECOR (Iowa)—No.

ADRIAN GETAZ (Tenn.)—No.

DR. J. P. H. BROWN (Ga.)—Yes.

C. H. DIBBERN (Ill.)—No, no, no.

REV. M. MAHIN (Ind.)—I think not.

J. M. HAMBAUGH (Calif.)—I think not.

G. M. DOOLITTLE (N. Y.)—Not with Doolittle.

MRS. J. M. NULL (Mo.)—No, not as a general rule.

PROF. A. J. COOK (Calif.)—Yes, but not invariably by me.

P. H. ELWOOD (N. Y.)—I should answer no, emphatically.

L. STACHELHAUSEN (Tex.)—I do not know, but I do not think they can.

WM. ROHRIG (Ariz.)—As a rule, I should not. I would use separators.

N. E. FRANCE (Wis.)—Yes, but not all with a profit. Some will be ill-shaped.

R. L. TAYLOR (Mich.)—Markets generally now demand honey produced with separators.

S. T. PETTIT (Ont.)—Not now. Some of us used to do it, but the standard is higher now.

O. O. POPPLETON (Fla.)—Not as a rule. Sometimes one can be successful, but I would not risk it.

C. DAVERNPORT (Minn.)—Yes, but with me a good many are bulged, or so uneven that they can not be cased.

C. P. DADANT (Ill.)—Yes, but they are not quite so easily put into shipping-cases. They are usually heavier than the others.

R. C. AIKIN (Colo.)—No, except with strong colonies and in rapid honey-flows; these come about once in 10 years, and about once in a thousand miles. I say *No!*

E. D. TOWNSEND (Mich.)—Yes. Use 1½-inch spacing, full sheets of comb foundation without bait-sections. I have seen bee-keepers that would better stick to the separators.

E. WHITCOMB (Nebr.)—I think not; at least I have never seen any. Sometimes we see them on exhibition at the honey shows, but the judges have a faculty of gently setting them aside.

E. S. LOVESY (Utah)—Hardly, but if the bee-keeper uses full sheets of foundation it will often pass, as it is generally heavier than a full section, but, as a rule, it doesn't give satisfaction.

DR. C. C. MILLER (Ill.)—That depends upon the market. For most markets, and especially for distant markets, separators are a necessity with me. If honey would always come in a flood, they would not be so necessary.

JAS. A. STONE (Ill.)—No. When we were getting honey for display at the Chicago World's Fair, we agreed to take all out of 2300 pounds from one man (who had gotten it without separators) that would crate without the combs rubbing, and he got us only a little over 600 pounds.

JAMES A. GREEN (Colo.)—Yes. It would have to be a very poor article of honey that was not marketable—at some price. But I do not believe it is profitable to dispense with separators. I do not believe it is possible to produce without separators, in a commercial way, that is, on any large scale, honey that can be satisfactorily packed, shipped and retailed. There is certain to be a great deal more breakage, leakage, and consequent loss and dissatisfaction than with separated honey. I have met grocers who declared they would never handle any more honey because of their experience with unseparated honey, and I am sure that if I were a consumer the average unseparated article would tend to discourage my use of honey.

G. W. DEMAREE (Ky.)—It depends upon your market for honey in the comb. In my locality so many people prefer their comb honey packed in buckets and jars, and covered with honey in the extracted form, that it is no trouble to sell all the "out of shape" sections produced without separators, and at a better profit than is realized from the fancy pick. When the impractical fancyites quit writing about "chunk honey" to discourage the introduction of really fancy-packed comb honey, the way will be opened for better profits, at least in a small way in apiary work. Several years ago I shipped to Louisville, Ky., from 100 to 200 buckets of comb honey cut from the section boxes and packed in the buckets (4 to 8 quart buckets) in an upright position, and covered with extracted honey, and the profit exceeded that of my fancy crated sections.

Honey as a Health-Food.—This is a 16-page honey-pamphlet intended to help increase the demand for honey. The first part of it contains a short article on "Honey as Food", written by Dr. C. C. Miller. It tells where to keep honey, how to liquefy it, etc. The last part is devoted to "Honey-Cooking Recipes" and "Remedies Using Honey". It should be widely circulated by those selling honey. The more the people are educated on the value and uses of honey the more honey they will buy.

PRICES, prepaid—Sample copy for a two-cent stamp; 50 copies for 70 cts.; 100 for \$1.25; 250 for \$2.25; 500 for \$4.00; or 1000 for \$7.50. Your business card printed *free* at the bottom of the front page on all orders for 100 or more copies. Send all orders to the office of the American Bee Journal.



Contributed & Special Articles

No. 1.—What is the Best Bee-Hive?

BY ALLEN LATHAM.

CLIMATE, local conditions, purpose, and individual taste have all combined to bring into use a great variety of hives, and few of these hives are without their stanch supporters—supporters so stanch that only the most cogent argument backed up by the strongest of confirmatory facts will persuade them to desert their hive for some other of different style. It is possible, but not likely, that they are using the hive best suited to their needs, and however much a bee-keeper believes in his own hive, he should be ready to listen to arguments in favor of, other hives, and even ready to try for himself the principles of these new hives, so that, should he find them superior to those of his own hives, he can with the least possible delay substitute the better for the inferior.

I used for 17 years a hive with free hanging frames made according to descriptions found in an old edition of Father Langstroth's book. I liked the hive and still use a few, but as I learned more and more of the needs of bees in this climate, I saw more and more weaknesses in this hive. For some three years I studied and planned a hive which I only waited an opportunity to construct and make trial of. My business was so pressing, however, that it was only three years ago that I finally made a hive which involved as many of the desirable points as I could work into it.

That year I had occasion to travel about a great deal, and I was greatly impressed by the vast extent of unoccupied bee-territory. If only I could get small apiaries established here and there to gather the honey which was yearly running to waste, I might add to my income in a most satisfactory way.

But to keep two or three hundred colonies of bees widely scattered in ordinary hives would call for such an expenditure of time and energy that the project would surely fail; and my whole attention was therefore turned to the making of a hive which would run itself eleven and nine-tenths months of the year, and which would require no care beyond the keeping up of the quality of the bees and the removal of the honey. A hive that would be cool in summer but warm in winter; a hive which would have a right entrance the whole year through; a hive which would keep out mice and other intruders; a hive which would be proof against rain, wind and all other elements—one, in fact, which was practically automatic.

Such a hive must be large, and yet small.

I finally built four hives which apparently solved the problem, for they were sufficiently successful to warrant my making 28 more, and their continued success is such that I hope to make many more this winter.

The hives were made double-walled with air-space lined on both sides with many thicknesses of newspaper, and the outside was covered with Paroid roofing-paper. The cover was made to telescope over the whole, and was arranged to nail or screw on. The bottom was made fast and also double. The frames, 20 in number, and measuring 14 by 11 inches inside measure, were closed ends and closed tops, and were hung crosswise of the hive. The inner bottom of the hive sloped from the back to the front, so that there was a space about an inch deep under the front frame, and only a bee-space under the backmost frame. A wedge-shaped strip of wood was nailed on the bottom thick end to the front to serve as a ladder for the bees under the middle of the frames, while either side-wall also furnished easy access to the frames. The entrance was made the full width of the hive and of varying depth. I now make the entrance $\frac{1}{2}$ of an inch deep and run through it a row of wire nails $\frac{1}{2}$ of an inch apart to keep out mice in winter.

The hive has other kinks which I will not take the space here to describe, as I have pointed out its salient features.

Such a system of bee-keeping would not admit of the use of sections, nor would it lend itself readily to the production of extracted honey, and the production of chunk-honey seemed in every way to meet best the needs of the case. The long hive was adopted rather than the tall for

two reasons—it would make a better winterer, and was more stable.

The success of these hives has led me to construct a hive for use in the home yard which should have the essential features of the large hive described above, and yet be arranged for the production of section honey in the regular way. I now have 20 such hives and like them very much. These hives have closed-end frames hung crosswise; are extremely warm and well ventilated; are cheap, made as they are from boxes procured at the grocery; are so constructed as to avoid the objections which many have for frames hung crosswise.

Much of what I have said thus far is largely introductory to that which is to follow. Such an introduction is unpar-
donably long, but without it I should find it difficult to make clear all I wish to say. The purpose of writing these articles is to exploit the closed-end frame and the crosswise frame; for these two features combined furnish a subject well worth the most careful attention of every man or woman who keeps bees.

On pages 213, 292 and 468 (1904) will be found queries and answers relating to this subject. If you are interested in this present article you will be repaid if you refer to the pages named. You can gather from page 213 that the objection that most bee-keepers have to a closed-end frame is that it lacks ease of manipulation, and that such is true few if any will question. Why, then, have anything but a free-hanging frame? Simply because the ease of manipulation is a minor factor with most bee-keepers. Truly, I believe that the majority of bee-keepers would be better off if their frames offered many difficulties in manipulation, for I know that much harm is done by needless handling of the frames. The best bee-keeper is he who can get fine results from a colony and not have to loosen a frame from its place for months at a time.

That queen-rearing calls for much manipulation renders the closed-end frame unfit for that branch of bee-keeping; and it is doubtful if the closed-end has sufficient advantages to offset its awkward features in the production of extracted honey; but for the production of comb honey its advantages far out-weigh any objections that can be raised.

That the closed-end frame causes the death of bees in rapid handling is true, but what of the lives of thousands of bees that it saves? And right here let me say that it will not cause the death of any more bees than will the wide bottom-bars which some of our sages are advocating.

The great advantage of the closed-end frame is its power to conserve heat, for it not only makes the broodness more snug and free from so much intercommunication of currents of air, but it furnishes an air-space on two walls of the hive. Space which was worse than useless before is converted by this style of frame into actual and valuable use. It is obvious now if it has not been before that the closed-end frame which I speak of is closed to the very bottom.

Frames well made, with smooth and square edges, pressed close together, are not hard to get apart, and after one is used to the handling of them he will find that for all the ordinary needs they are as easy to manipulate as free-hanging frames.

There are other advantages besides that of heat-saving. These frames are right where you want them all the time. If a hive gets knocked over by roving beast or mischievous boy little harm is done, and when it comes to moving hives about a man blesses such a frame.

Many bee-keepers call for a self-spaced frame, and find in the Hoffman what they believe meets their needs. Why any one will use a Hoffman frame is beyond my understanding, for it has practically all the disadvantages of the closed-end frame with only one and a half of the advantages. It keeps frames in place, and it shuts out half of the too-much circulation of cold air. Why in the name of common sense not carry the full width of the end-bar clear to the bottom and get all the advantages?

New London Co., Conn.
(Continued next week.)



"Shook Swarming" and "Red Clover" Queens.

BY C. P. DADANT.

Having about as many colonies as I can well keep in town (providing they all winter), I am planning to start an out-apiary next season, and I was thinking that it might be a good plan to practice "shook swarming", and at the same time secure a supply of long-

tongued (red clover) queens, introduce them among the brood and nurses left queenless, thus saving them the two or three weeks' time before they could rear a laying queen of their own. If there are any vital objections, please give me the benefit of your experience. Also, whether you would advise me to invest in so many long-tongued queens—say 15 to 25—or would it be safer to get only a few, and the balance Italians?—G. A. H., Pittsfield, Ill.

Replying to the above query, which reached me a few days ago, I will say to begin with, that I am very much in favor of the method called "shook swarming" by our modern bee-keepers. There is nothing new in any of the manners by which this is done, but the name, although perhaps appropriate, has not "took" my fancy to any extent.

The manner of procedure which I prefer because it is the safest, is to make one "swarm" out of two colonies. I have always been in favor of safe methods, and very much admire an old Italian proverb:—

Chi va piano va sano,
Chi va sano va lontano.

"Whoever goes slowly, goes safely; whoever goes safely goes a long time."

The swarm is shaken from a colony into a new hive, including the queen and one comb of brood which is given at the same time. The swarm is left on the parent colony's stand, and the parent colony itself is moved in the place of another strong colony, which is in turn removed to a new spot. If a queen is at once given to the colony from which the old queen has been taken, there will not be much danger of swarming, but in case the bees are noticed building queen-cells a new swarm may be made from the same hive in a few days, and before a natural swarm has had time to issue.

Now as to red clover queens. I have seen very much in the papers about these, and have heard them praised, but I am very skeptical about any one having secured any very positive and lasting traits in a race of bees in the short time that we have had the Italian bee with us. I know of traits which may be fixed quite readily, such as color, but the length of tongue has varied very much. From the very beginning of the importations (and our old bee-keepers will remember that we were once the most active importers), bees have been found that could get honey from red clover; yet, however much I tried I never could secure a positive advantage; that is, secure bees that would show regularly.

There is a time when no bees can work on red clover and I have also seen times when even the little common bees worked on its blossoms. I believe that the length of corolla of the clover bloom depends upon climatic conditions, and that there are seasons when all the bees are able to reach the honey in its bloom.

When we first imported bees we had an old friend living near us who was very much interested in this matter. He was the first to notice that the Italians worked on red clover. But one day he came to me and said the common bees had noticed the others working on the clover and were trying it, too, but could not succeed. I followed him to the field and saw both blacks and Italians at work, and for all the willingness I had to see the thing as he did, I could not help concluding that they were all working alike, and that neither the Italians nor the blacks were making much headway, although they seemed quite busy. This was some 30 years ago, and although we have had some of the so-called red clover queens, I have yet to see a single barrel—even a single 10-pound can—of red clover honey put upon the market. I was once shown a case of very nice honey by a bee-keeper who claimed it was from red clover, but a test of this honey disclosed the fact that it was strongly flavored with basswood, and I concluded that the man was deceiving himself in thinking that he had succeeded in producing red-clover honey.

Yet, we must not discourage the steps that are taken towards red clover bees, for it is a step in the right direction; but I do not think I would rely on the possibilities of stock from any one apiary. On the contrary, if I desired to buy bees I think I should order from two or three different reliable breeders, taking care to secure good, prolific bees without paying much attention to the yellow color, for too many are putting color as the first requisite.

There is no doubt that queens, reared in the South and brought up to our Northern States at the time of swarming, will save much time to the colonies that are divided by shaking or otherwise, and at the present prices it pays better for a honey-producer to buy his queens from the South than to rear them in our northern climate.

Hancock Co., Ill.



Our Sister Bee-Keepers

Conducted by EMMA M. WILSON, Marengo, Ill.

"Lebkuchen" or Spice-Cake.

It's German, and called by the Germans "Lebkuchen", taken from *Praktischer Wegweiser*. Boil a quart of honey in water to which has been added the rind of a lemon. When cooled to milkwarm, add a quart of rye flour and one of wheat flour, besides two ounces of cinnamon and cloves, then a handful of preserved orange-peel cut fine, a heaping tablespoonful of soda, the whole thoroughly mixed.

Knead this dough well upon the board, roll out as thick as the little finger, cut into cakes, glaze with white of egg, put almond meats on top, and bake in tins in a tolerably hot oven. While still hot glaze with powdered sugar stirred thick into water, which immediately dries into a glass-white glazing.

These cakes keep well in tin cans, and are excellent.

Preventing Second Swarms.

I had one colony of bees in the spring of 1904 that had wintered, and had two swarms in the summer, with 18 pounds of honey. (MRS.) M. E. BARBOUR.

Barron Co., Wis., Dec. 19.

You would probably have had more honey if you had allowed the colony to swarm only once. Of course, it is all right to allow a second swarm if it is increase you desire, but if honey, then one swarm is enough.

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two reasons—it would make a better winterer, and was more stable.

The success of these hives has led me to construct a hive for use in the home yard which should have the essential features of the large hive described above, and yet be arranged for the production of section honey in the regular way. I now have 20 such hives and like them very much. These hives have closed-end frames hung crosswise; are extremely warm and well ventilated; are cheap, made as they are from boxes procured at the grocery; are so constructed as to avoid the objections which many have for frames hung crosswise.

Much of what I have said thus far is largely introductory to that which is to follow. Such an introduction is unpardonably long, but without it I should find it difficult to make clear all I wish to say. The purpose of writing these articles is to exploit the closed-end frame and the crosswise frame; for these two features combined furnish a subject well worth the most careful attention of every man or woman who keeps bees.

On pages 213, 292 and 468 (1904) will be found queries and answers relating to this subject. If you are interested in this present article you will be repaid if you refer to the pages named. You can gather from page 213 that the objection that most bee-keepers have to a closed-end frame is that it lacks ease of manipulation, and that such is true few if any will question. Why, then, have anything but a free-hanging frame? Simply because the ease of manipulation is a minor factor with most bee-keepers. Truly, I believe that the majority of bee-keepers would be better off if their frames offered many difficulties in manipulation, for I know that much harm is done by needless handling of the frames. The best bee-keeper is he who can get fine results from a colony and not have to loosen a frame from its place for months at a time.

That queen-rearing calls for much manipulation renders the closed-end frame unfit for that branch of bee-keeping; and it is doubtful if the closed-end has sufficient advantages to offset its awkward features in the production of extracted honey; but for the production of comb honey its advantages far out-weigh any objections that can be raised.

That the closed-end frame causes the death of bees in rapid handling is true, but what of the lives of thousands of bees that it saves? And right here let me say that it will not cause the death of any more bees than will the wide bottom-bars which some of our sages are advocating.

The great advantage of the closed-end frame is its power to conserve heat, for it not only makes the broodnest more snug and free from so much intercommunication of currents of air, but it furnishes an air-space on two walls of the hive. Space which was worse than useless before is converted by this style of frame into actual and valuable use. It is obvious now if it has not been before that the closed-end frame which I speak of is closed to the very bottom.

Frames well made, with smooth and square edges, pressed close together, are not hard to get apart, and after one is used to the handling of them he will find that for all the ordinary needs they are as easy to manipulate as free-hanging frames.

There are other advantages besides that of heat-saving. These frames are right where you want them all the time. If a hive gets knocked over by roving beast or mischievous boy little harm is done, and when it comes to moving hives about a man blesses such a frame.

Many bee-keepers call for a self-spaced frame, and find in the Hoffman what they believe meets their needs. Why any one will use a Hoffman frame is beyond my understanding, for it has practically all the disadvantages of the closed-end frame with only one and a half of the advantages. It keeps frames in place, and it shuts out half of the too-much circulation of cold air. Why in the name of common sense not carry the full width of the end-bar clear to the bottom and get all the advantages?

New London Co., Conn.
(Continued next week.)



"Shook Swarming" and "Red Clover" Queens.

BY C. P. DADANT.

Having about as many colonies as I can well keep in town (provided they all winter), I am planning to start an out-apiary next season, and I was thinking that it might be a good plan to practice "shook swarming", and at the same time secure a supply of long-

tongued (red clover) queens, introduce them among the brood and nurses left queenless, thus saving them the two or three weeks' time before they could rear a laying queen of their own. If there are any vital objections, please give me the benefit of your experience. Also, whether you would advise me to invest in so many long-tongued queens—say 15 to 25—or would it be safer to get only a few, and the balance Italians?—G. A. H., Pittsfield, Ill.

Replying to the above query, which reached me a few days ago, I will say to begin with, that I am very much in favor of the method called "shook swarming" by our modern bee-keepers. There is nothing new in any of the manners by which this is done, but the name, although perhaps appropriate, has not "took" my fancy to any extent.

The manner of procedure which I prefer because it is the safest, is to make one "swarm" out of two colonies. I have always been in favor of safe methods, and very much admire an old Italian proverb:—

Chi va piano va sano,
Chi va sano va lontano.

"Whoever goes slowly, goes safely; whoever goes safely goes a long time."

The swarm is shaken from a colony into a new hive, including the queen and one comb of brood which is given at the same time. The swarm is left on the parent colony's stand, and the parent colony itself is moved in the place of another strong colony, which is in turn removed to a new spot. If a queen is at once given to the colony from which the old queen has been taken, there will not be much danger of swarming, but in case the bees are noticed building queen-cells a new swarm may be made from the same hive in a few days, and before a natural swarm has had time to issue.

Now as to red clover queens. I have seen very much in the papers about these, and have heard them praised, but I am very skeptical about any one having secured any very positive and lasting traits in a race of bees in the short time that we have had the Italian bee with us. I know of traits which may be fixed quite readily, such as color, but the length of tongue has varied very much. From the very beginning of the importations (and our old bee-keepers will remember that we were once the most active importers), bees have been found that could get honey from red clover; yet, however much I tried I never could secure a positive advantage; that is, secure bees that would show regularly.

There is a time when no bees can work on red clover and I have also seen times when even the little common bees worked on its blossoms. I believe that the length of corolla of the clover bloom depends upon climatic conditions, and that there are seasons when all the bees are able to reach the honey in its bloom.

When we first imported bees we had an old friend living near us who was very much interested in this matter. He was the first to notice that the Italians worked on red clover. But one day he came to me and said the common bees had noticed the others working on the clover and were trying it, too, but could not succeed. I followed him to the field and saw both blacks and Italians at work, and for all the willingness I had to see the thing as he did, I could not help concluding that they were all working alike, and that neither the Italians nor the blacks were making much headway, although they seemed quite busy. This was some 30 years ago, and although we have had some of the so-called red clover queens, I have yet to see a single barrel—even a single 10-pound can—of red clover honey put upon the market. I was once shown a case of very nice honey by a bee-keeper who claimed it was from red clover, but a test of this honey disclosed the fact that it was strongly flavored with basswood, and I concluded that the man was deceiving himself in thinking that he had succeeded in producing red-clover honey.

Yet, we must not discourage the steps that are taken towards red clover bees, for it is a step in the right direction; but I do not think I would rely on the possibilities of stock from any one apiary. On the contrary, if I desired to buy bees I think I should order from two or three different reliable breeders, taking care to secure good, prolific bees without paying much attention to the yellow color, for too many are putting color as the first requisite.

There is no doubt that queens, reared in the South and brought up to our Northern States at the time of swarming, will save much time to the colonies that are divided by shaking or otherwise, and at the present prices it pays better for a honey-producer to buy his queens from the South than to rear them in our northern climate.

Hancock Co., Ill.



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Our Sister Bee-Keepers

Conducted by EMMA M. WILSON, Marengo, Ill.

"Lebkuchen" or Spice-Cake.

It's German, and called by the Germans "Lebkuchen", taken from *Praktischer Wegweiser*. Boil a quart of honey in water to which has been added the rind of a lemon. When cooled to milkwarm, add a quart of rye flour and one of wheat flour, besides two ounces of cinnamon and cloves, then a handful of preserved orange-peel cut fine, a heaping tablespoonful of soda, the whole thoroughly mixed.

Knead this dough well upon the board, roll out as thick as the little finger, cut into cakes, glaze with white of egg, put almond meats on top, and bake in tins in a tolerably hot oven. While still hot glaze with powdered sugar stirred thick into water, which immediately dries into a glass-white glazing.

These cakes keep well in tin cans, and are excellent.

Preventing Second Swarms.

I had one colony of bees in the spring of 1904 that had wintered, and had two swarms in the summer, with 18 pounds of honey. (MRS.) M. E. BARBOUR.

Barron Co., Wis., Dec. 19.

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would be were Polaris blotted out—nothing bigger than fifth magnitude for 12 degrees radius.

BULK COMB HONEY MARKET.

Market for bulk comb in danger of being overstocked. One would think so if they are all going at it. Decided limits to the market—and market partly founded on the miserable untruth that sections are fabricated. Customers too enlightened to take any stock in the cry of manufactured comb, and in the habit of buying sections, are not likely to join in a stampede back to chunk honey. Page 792.

PRICKLY PEAR AS BEE-FEED.

Who'd a-thought it? Who knew prickly pears were plenty enough anywhere to use as bee-feed? D. C. Milam is one of the pathfinders whose path few people are likely to follow. Page 792.

"STRAINED" HONEY AND GIRLISH BEAUTY.

It's a villainous reminder of dark ages—still, with us—that 'most everybody persists so in saying "strained honey". And, Sister Wilson, when we copy recipes that have the vicious phrase in, let's quietly change it and say nothing—as might have been done on page 793. No, I'll take that back. To make a nice girl more beautiful than she already is requires such "pauwerful" influences that it's to be supposed that it won't do to trust commercial extracted honey. Crush a good section and pass it through gauze and have some real strained honey.

SUGAR NOT GOOD FOR REARING QUEENS.

"I feed honey—sugar is not fit to rear queen-bees on." This gospel, according to Darrow, sounds to me like good, sound gospel, albeit I am not a safe authority, not being a queen-breeder. Perhaps something would depend upon the condition of the pollen-supply. Sugar syrup very inadequate when pollen is scarce, but almost tolerable when abundance of pollen is coming in every day. Page 796.



Doctor Miller's Question Box

Send Questions either to the office of the American Bee Journal, or to Dr. C. C. MILLER, Marengo, Ill.

Correspondence School in Bee-Keeping.

What do you think of correspondence schools in bee-keeping? Do you think bee-keeping can be learned as quickly in that way as when working with an experienced bee-keeper? ILLINOIS.

ANSWER.—No amount of correspondence can equal in value direct instruction at actual work in the apiary from the same teacher; but for one who can not have this advantage it ought to be worth much to have the privilege of information upon any desired points through the mail; and I suppose something of this kind is meant by a correspondence school in bee-keeping.

Queenless Colony in the Cellar—Using Unfinished Sections.

1. I put 10 colonies of bees into the cellar Nov. 10, all in fine condition with plenty of stores and bees. Dec. 22 in looking them over I found a hive in which I could see no bees, so I opened it and found about 150 dead bees and no live ones. All of the combs were in good condition, with no sign of any disease, that I could see. On the center of the middle comb there was a moldy spot about the size of a half dollar, on which there were about 50 dead bees. There was about 35 pounds of honey in the 8 frames. (I use the 8-frame hive.)

Out of 11 colonies this one did the best last season, and was a large colony when I put it into the cellar. What became of the bees? My bee-cellars is a small room off from the main cellar. The temperature is from 40 to 45 degrees. Have been troubled with mice to some extent, but there are no traces of them in this hive I speak of.

2. Would it be all right to put sections that are from $\frac{1}{4}$ to $\frac{1}{2}$ full of honey, partially capped and somewhat candied, in the supers, then put them on the hives next summer? Would the bees eat it out, or would they fill up the sections and cap them over? CONN.

ANSWERS.—1. If the colony was strong when put into the cellar, I can not imagine any way by which in 6 weeks' time the bees should disappear entirely, unless they should move out in a body and go into

another hive, which is very unlikely. It is rather more likely that although the hive was heavy when put into the cellar, it did not contain such a very large number of bees, the colony having become queenless some time before. In that case the bees that were left would be old, and what were left might come out of their hives and die on the ground during the 6 weeks.

2. It will not be well to put them in supers to put on the hives. If very short of stores, the bees might empty out the candied honey if given early enough, but the probability is that a good deal of it would be left in the sections, and the bees would fill up the empty space and seal over. Yet if you like candied honey for your own table, as some do, it will work all right. If you don't want any candied honey in the sections, you can melt them up, taking care not to overheat, taking off the cake of wax when cold.

Putting Bees in the Cellar—Sainfoin and Sweet Clover Seed.

1. I have 11 colonies of bees that I wish to move $10\frac{1}{2}$ miles. When I bring them home can I put them into the cellar at once, or would I better let them stay out-of-doors and have a flight before putting them in?

2. Where can I find sainfoin seed? I want to try it in this locality.

3. Can I get sweet clover seed in Chicago? I see in the American Bee Journal that a man in Kansas City advertises it, but that is quite a distance for me to send for it.

INDIANA.

ANSWERS.—1. Better put them in at once unless you are pretty sure they'll have a flight in 2 or 3 weeks.

2. From any leading seed dealer.

3. Yes, it is always to be had in Chicago, and generally in any large place.

Disturbing Bees in Winter.

I opened a hive last Saturday in the upper part of which was 6 pounds of honey in one-pound sections. This I took out. All the other sections were empty. In the lower part of the hive were 10 frames all full of fine honey, about 50 pounds. My friend said that I could take some or all of it out and feed the bees with sugar. I tried to take 3 frames out, but they broke, so I left all of it in. I think this did a great deal of harm to the bees. What can I do? The weather is very cold now, and the bees can't fly out.

NEW JERSEY.

ANSWER.—It is a pity you made such a mistake as to attempt to take anything from the bees so late as the first week in December with the idea of replacing it with sugar syrup. It's a doubtful step to do that sort of thing at any time, and if done at all should be as early as September. Very likely there isn't anything to be done now. It is possible that the bees are all right on the broken combs just as they are. If, however, you want to do something for them, you might peep in, and if the combs have fallen so as to be packed together, you might raise them on edge, if necessary putting little sticks between them so as to keep them apart about half an inch.

Wintering Bees in a Repository.

I bought 75 colonies of bees last fall in Langstroth hives, from the widow of a bee-keeper who died last March. I leased the ground and bee-house. Yesterday I began putting them in at 10:30 a.m. and finished at 1:30 p.m. I expected to set them like Boardman's picture in A B C, but it was too warm to remove the bottom-boards, so I sat them one above another. And then the cleats on the corners were uneven, so they would not set level side by side. They have only a $\frac{3}{8}$ x 14 entrance, and I fear it will get clogged with bees. This is my first experience with a winter repository.

Can I go into the bee-house soon with a dim light, pry up the bodies and place inch blocks under the front corners? They are 4 hives deep, and weigh 80 pounds. Or would you depend upon going say Jan. 15, February and March, and cleaning out the dead bees with an iron rod? Half of them have a $1\frac{1}{2}$ -inch hole in the covers. Their former owner wintered them for 30 years just as I have them fixed.

MISSOURI.

ANSWER.—If for 30 years they have been wintered just as they are, and if that wintering has been entirely successful, it would seem a pretty safe thing to continue without change. Yet, on general principles, I should fear that a $\frac{3}{8}$ entrance would get clogged. Little danger just at first, the trouble becoming constantly worse as winter advances. So it is probably advisable to increase the ventilation as early as some time in January. If you go about it quietly there ought not to be much trouble. A dark lantern, a bicycle lamp, or a common lamp having a paper over the chimney with a hole cut in one side will be good. It's a question which will be best, to pry up the hives just as they stand or to re-pile them, loosening up each one as you pile. If they get too much stirred up, you can wait for them to settle down. Even if it should take you a day or two, you'll sleep enough afterward to feel that there's little danger of their smothering with clogged entrances.

See Langstroth Book Offer on another page of this copy of the American Bee Journal.



Convention Proceedings

THE ST. LOUIS CONVENTION.

Report of the 35th Annual Convention, of the National Bee-Keepers' Association Held at St. Louis, Mo., Sept. 27-30, 1904.

Continued from page 10.]

The President called on Prof. Louis H. Scholl, of Texas, to address the convention on

SOMETHING ABOUT TEXAS BEE-KEEPING.

Prof. Scholl—I have not had time to get up a paper as I should have done, and, therefore, I have only taken a few notes which I generally put down in this little book. I shall say a few words about Texas, although I do not know whether it will be as a paper would have been. The trouble is I don't know what you all want to know about Texas. We have a State down there, a big old piece of land, and have some bee-keepers in there, and some of them are a pretty good size, not only in the number of colonies, but they grow big, too.

Now, most of you know something about the statistics of Texas in the way of the production of honey. In the last census, gotten out in 1899, we have nothing to show exactly what we have down there, but I have been working on it in the way of getting statistics for our department, and have obtained some figures that are considerably larger than the census reports got out. In getting these statistics I am trying to get a complete name list of the bee-keepers in the State, and in that way I have them report to me the number of colonies they have, the amount of honey produced, and other things, and thus I have gotten at some figures. I may say that we have over 400,000 colonies of bees in the State, and the amount of honey produced by these is only about 5,000,000 pounds, that is, the average per colony is only about twelve pounds, due to the fact that we have so many little one-horse bee-keepers and box-hive keepers, although we have some of the very best you can find anywhere, and some of them with large apiaries and producing lots of honey. Now, figuring on these colonies at that low average we have an output of more honey than any other state, and we claim that Texas is in the lead in the output of its honey product. If that is the case with such a low average, where would Texas be with the average raise, which can be done because we have the country down there. If we improve our bees and everything we can have an output away beyond what we have now, and in that case Texas would simply be away ahead.

Now somebody may be interested in the way I would divide Texas as a honey State: Beginning with North Texas, north of Fort Worth, where we have very few bees, it is a plain, and nothing but cattle there, and very little bee-forage.

In East Texas, where we have our pine forests and oil and rice lands, we have along the low places and rivers a good deal of basswood, quite an abundance of it, and of holly, and these yield a large amount of honey, but the trouble there is the country is not settled up yet and there are very few apiaries located there. Those that are located produce a whole lot of honey, but the great abundance of the honey is of poorer quality.

Take Central Texas, that is the great cotton-belt; there we produce cotton-honey mostly, and there is where we have more of the horse-mint, but of late years on account of the drouth the horse-mint has become scarce, and on account of the boll-weevil, which is one of our greatest evils down there, the cotton crop has been cut short.

Take West Texas, it is a somewhat mountainous portion and there are only some localities that produce honey properly, and sumach is the only honey-plant worthy of mention.

Then South Texas, below Houston, is a low, swampy plain, and rice and things like that are produced more than anything else, and along the rivers and the lagoons and lakes we have the rattan-vine which yields a lot of honey, but it is of poorer quality. It is shipped to the Northern market for manufacturing purposes.

When we go to Southwest Texas we go to a country that I do not think can be surpassed anywhere. We have there almost an unlimited amount of bee-pasture; we have the mesquite tree, the wahea, the cat-claw and many other things; even the prickly pear, with which some of the prairies are just covered, helps us out a good deal in some years.

I have been asked a great many questions about locations in Texas for bee-keepers. I might say that we have many locations in Southwest Texas where bee-keeping could be carried on and large amounts of honey gathered, but most of these are away from the railroads and most of the land is sandy land, and a person would simply have to go out and camp and "bach" out in the woods, and haul his product to the railroad stations about 40 or 50 miles, and run things at long distances. Southwest Texas is not a very good farming country. It is only of use as a cattle country and for bee-keeping. They both go well there. As the railroads are opening up the land, bee-keeping will progress and open up new localities, and the time will come when Southwest Texas, if properly stocked up with bees, will be the greatest bee-country I know of or have any idea of.

I would like to say a few words about agriculture at the Texas A. and M. college. I have had the position as apiarist at the Station and have charge of the agricultural work of the State, and I believe that great good could be done by having such work carried on by the Experiment Station. I would like this so that other States might take up the work as they surely should do. I think much good could be done if they could do so. We have at College Station an apiary of 40 colonies, and a bee-house and all the equipments necessary, besides a good deal of other equipment which is mainly kept there for show and for the use of students, to get them acquainted with the different materials used, and I think we have the best equipped station or experimental apiary anywhere in the world; at least it has been pronounced so by everybody that has seen it or knows anything about it. It was established in 1902, when we received an appropriation from the State Legislature of \$750 to start with; that was for two years; for the next two years, 1904-5, we have received \$900 more, and with this money we have been enabled to establish this apiary and all the equipment, and we have received from the college ten acres of land for the location, with a ravine running through it, all of which makes an ideal location for an apiary. We have put up a bee-house which has been planned and built so that later on it will be used as a plan to be given out to the bee-keepers so that they can copy after it, and build ideal bee-houses for their own use.

We have in this enclosure about four acres of land in two fields put into cultivation for the testing of honey-plants, and we have planted a good many different honey-plants that have been written about, and that we have run across, to see as to their value and whether it will pay or be profitable to plant trees. We have tried as many as forty different kinds for the last two years—forty-one different kinds this year—and we have found only a very few adapted to the conditions of Texas that will be profitable to plant for honey; these at the same time are planted for forage. Besides, many of the experiments that we have carried on show that it would not pay to raise any of these others for honey alone. Further experiments will be carried on along these lines. We have been looking around also for honey-plants or shrubs from further west, from the more arid regions, with the view of planting these in localities where the natural honey-flow is scarce. If we could propagate plants from other localities, in other words, put up an artificial yield of honey, it would increase apiculture and we could have honey-producing localities where no honey is produced now. This will take a good deal of work and time.

In the apiary we have several different races of bees which are tried for different experiments. As we get their results they will be published later.

In the way of experiments we have a good many on

our list. As time goes on it becomes more apparent that some of these experiments must be carried out by people who have some say so, who have some authority, so that after the experiments are made we have something to go by. For instance, when we went through this glucose and sugar feeding mist that comes up every once in a while, if we had some authority on this subject, someone that could tell us just exactly all about it, it would help us out a whole lot. Some of these things are exactly what we are going to do down at the Station. Last night I took some notes on these very things, and we are going to try those. It takes time and money to carry out accurate experiments of this kind. I should say that work of this kind should be carried out at every State station, and if the bee-keepers only will, they can have such work done. It was brought about by our bee-keepers down in Texas. We had our first meeting at College Station in 1901. While down there we made a request for an apiary at the college, and an apiarist, where such work could be carried on. I am glad to say it succeeded, although it took lots of hard work. We secured only a very small appropriation, \$750, but it gave us a start, and now we enjoy having the best equipped experimental apiary anywhere, and are going to try to keep ahead of any that ever comes up.

One of the experiments we have under way is the manufacture of honey-vinegar. In large apiaries there is always a waste of honey, and if we could manufacture that into honey-vinegar, and work up a market for it, and sell it, we could save a whole lot of money for the bee-keepers. Then we have a lot of cheap-grade honey that should not be put on the market, and which, if put on, lowers the price of good honey. We are trying to find out if this cannot be made into honey-vinegar to more profit, and thus save the price of the better-grade honey.

Another experiment we are going to start is along the wax and foundation line. We are going to try to find out the amount of honey consumed to produce wax. While it would not perhaps be profitable to convert the cheap honey into wax, perhaps we could take this cheap honey and have the bees convert it into wax and put it on the market in the shape of wax instead of offering them the lower grades of honey at a cheaper price, thus lowering the price of the better grade. We are also experimenting along the line of rendering the wax of old combs, and along the line of such hives and accessories and other things. At almost every convention I attended last year, something like 14, the question came up as to the best hive, and similar questions; there also comes up the question as to the difference between the regular Langstroth and some others, and the divisible brood-chamber hive. Some of those things will never be settled unless they are taken up by some scientific worker, or somebody who will take accurate note of these things. If a bee-keeper has a hobby of his own he will bring up something, and he will claim his way is the best, and always have a hive of his own that he carries about with him. This is not the case with somebody that has this work in charge somewhere else. He wants to get down to the facts of the case; he does not care what the results will be; what he is after is to get at the fact, and prove it, and he will carry on the work until he is through with it, and then come back and go over it, and then when he gets through he has his results noted, and they are to the point. This cannot be done by the bee-keeper, for a good many reasons; he hasn't the time, and he has hives of his own, and he is not accurate enough. He cannot because he has too many other things calling for his attention. All these things should be taken up by the Station.

Honey-bottling is another one of our problems down there, in other words, putting up honey and preventing it from crystallization. It is quite an important problem, and I don't know yet what we are going to do with it. The majority of consumers prefer honey in a liquid state. We have some honeys there that granulate in a few weeks after being taken from the hive. Before we can put that on the market we have to reliquefy it, and maybe it will candy again. Sometimes we have honey on the road and it is delayed, and when it reaches the consumer it is candied, and he does not want "sugar-honey," and it is returned to the bee-keeper. If we could find a way of putting up this honey; especially of putting it up in a fancy way, as some people put it up, and keeping it from

granulating, it will be worth a whole lot.

Besides this there are a great many other problems. The work of managing outyards at long distances with the least amount of labor and attention, and trying to make the biggest amount of money out of our product. We have another apiary at one of the sub-stations and we have made arrangements for co-operative work. Texas is so large, and has such varied conditions, that we have to carry on our work in different sections, which makes it harder for the apiarists at the station. The coming year we will take up work along more scientific lines. We have made a card catalog of almost all of the scientific work that has been done, most of it taken from experiment station records. We did this so that we could see what had been done along these lines before we went ahead. We want to prevent all the repetitions possible.

At the College we have given instruction to the students in apiculture. The College has not been able to put on apiculture as a regular course because the time is taken up by other studies. They have made an elective study of it for senior class students, for the whole State; in this way we have had some State students, but during the spring-time of the College we have a short course in apiculture, and in this way we had 18 short-course students last year who took apiculture, and it prepared them pretty well for the work after they left the College. Besides this, we have students working in apiaries during the season who work under the Student Labor Fund, and in that way they get a good deal of information.

There are many questions that come up that should be taken up by experiment station people. I think an experimental apiary ought to be established at each of the experiment stations of the different States, especially those in which apiculture is carried on to any great extent, and this can be done by bee-keepers if they only go after it. We did it down there, and I think it can be done in other States.

LOUIS H. SCHOLL.

The President called upon Mr. Moe, the representative from Cuba, who was escorted to the platform by Mr. Hyde, after which the President introduced him to the convention.

BEE-KEEPING IN CUBA.

Mr. Moe—I did not come here with the idea of making a speech, and you will have to excuse me along any such lines. I came here to get what information I could along those lines of bee-keeping that interest me. You are aware, of course, that the conditions with us are very different from what they are with you in many respects. Your bee-keepers probably have different methods, so do we, and it possibly would not be practicable or wise to tell you all about our methods because you could not take them back home and apply them. I do not read your articles on winter bee-keeping, because they are of no value to me, and possibly for me to go on and tell you about what we do would be of no value to you. What interests me most is how I can produce the mos. honey, rear the best queens, and sell my honey to the best advantage. The question of wax cuts some figure with us. We can produce that perhaps better than you can. When I commenced bee-keeping there I wanted to do it perfectly, according to what you call the right method. I have got into it this far that I am cutting the corners off and going across lots; I am not doing all the fancy wiring and full-sheet foundation work; I found it didn't pay; we get so little flow of honey we have to produce it. I think if you give the matter study and thought you will find that it is all in the location. That is all I have to say, Mr. President.

(Continued next week.)

Some Facts About Honey and Bees.—This is the subject of an article written by Mr. J. E. Johnson, and published on pages 581-82 of the American Bee Journal for Aug. 25, 1904. We have republished it in 4-page leaflet form for general distribution, and furnish it, postpaid, at 35 cents per 100 copies. Send all orders to the office of the American Bee Journal.

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Reports and Experiences

Good Honey Crop.

The honey crop was fairly good last season. We had 17 colonies, spring count, and 1100 pounds of nice, salable section honey; no white clover honey. Bees went into winter quarters well supplied with honey.

R. A. MARSHALL,
Wright Co., Iowa, Dec. 28.

Bees All Right So Far.

Bees in New England are all right so far this winter. New Year's day offered a fine opportunity for a thorough flight. The thermometer registered 46 in the shade; there was little wind, and the sky was clear the whole day long. There should be no occasion for severe loss from long winter confinement this year. My own bees seem to be in excellent condition.

ALLEN LATHAM,
New London Co., Conn., Jan. 4.

Problem of Wintering Bees.

The article by Allen Latham, page 855 (1904), on wintering bees, is a very good one, but I think he left out one very essential part—that of an upward passage. Very likely he has a bee-space above the frames, but many do not have. I have kept bees over 25 years and can not remember losing one colony in wintering. But I have always read several good bee-papers.

I think over one-half of the loss of bees last winter was because the bees



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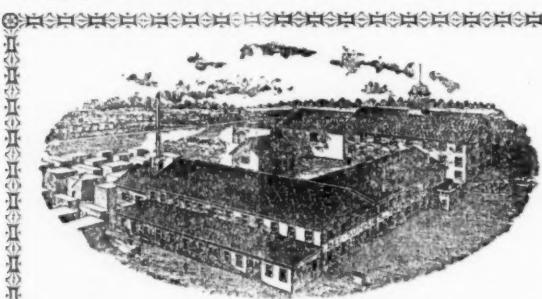
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could not get to the honey. Either they were not wrapped and packed properly or there was no upward passage. I positively do not believe it can be so cold they can not move to the honey as fast as eaten, if everything else is all right.

IRVING LONG.

Linn Co., Mo.

Light Yield of Honey.

The honey harvest the past season was light, taking the county through. From 27 colonies, spring count, I harvested 900 pounds of white comb honey. We got no fall honey in this county, but bees filled the hives quite well for winter. I have just got my bees into the cellar for winter. I increased to 43 colonies, which are in fair condition.

JOHN CLINE.

Lafayette Co., Wis., Dec. 10.

Marketing Honey—Wintering Bees —Sections.

This has not been as good a honey year as last. White clover yielded very little as it winter-killed last winter badly, and I think the young clover did not produce much. Still I got 2,540 pounds or about 60 pounds spring count, some of it nice basswood. I sell my honey all at home, going over the town of about 3,000 inhabitants about 3 or 4 times every fall, and I find that people will buy who never call for honey at the stores. When they see it they want it, or at least the children do. My wife sells what she can from the house, not like the English woman, on commission; she keeps it all and calls for more when she wants it.

I put my bees in the cellar the 14th of this month. The bottoms of the hives are nailed on. I tier up the 54 hives 3 high in rows, 5 without any special ventilation in a room partitioned off in the back end of my cellar 12x12 feet. I have practiced this for 20 years and my loss has not averaged 5 percent, except when they have been short of stores.

I use the 4 1/4 x 4 1/4 sections, 7 to the foot, 28 in a case. My hives are 19x14, outside measurement, and 9 1/2 deep, so you can see I have no waste room in the hives, nor a lot of traps to look after in the fall or winter. I believe in simplicity and utility. The one-piece square section is good enough for me. Sensible people will soon find out that the tall section fad is more for

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looks than to hold honey, and some of the old "honest Johns" will not be slow in comparing weights with them. Honesty is the best policy if a man wants to hold his home market sure.

I think Mr. Hasty is often too hasty. What suits one locality does not suit another. Like the tariff, some want high, some want low, and some none. Some want large hives, some small; some want side room to store in, some top. Give me a hive that my bees can increase in, and give them room on top as fast as they need it, and not a day faster.

W.M. CLEARY.
Kossuth Co., Iowa, Nov. 29.

Bees in Good Condition.

My bees are in good condition. I carried 2 colonies into the cellar the first of December. They were all good and heavy.

HENRY BRICKER.
Defiance Co., O., Dec. 23.

The Pennsylvania Bee-Keepers' Association.

On page 554 of the issue for Dec. 22 I find a report of the first annual convention of the Pennsylvania State Bee Keepers' Association. I find in Volume XI, pages 108 and 109, that the Pennsylvania Bee-Keepers' Association was organized in the city of Erie, Oct. 1, 1873, at the time of the State Fair. The officers elected for the first year, and who took their respective offices at once were: President, Seth

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Hoagland, of Mercer County; vice-presidents, John Sunell, of Dauphin County, and A. J. Lee, of Crawford County; secretary, W. J. Davis, 1st, of Venango County. Among those present, and joining the society, were J. R. Ely, president of the State Agricultural Society, Mr. Ray, of Westmoreland County, P. Morris, editor of the Practical Farmer, Dr. W. H. Eagle, of Harrisburg, and others from the central and eastern part of this State.

The report of the meeting makes very interesting reading, even now after the lapse of 31 years.

Mr. Hoagland reported that his colonies paid him in honey and increase \$80 per colony, spring count, in 1873. James Russell, the treasurer, of course took charge of the funds of the society, some \$16 or \$18. Would it not be well for the present P. B. K. A. to inquire about the ex-treasurer of the society of 1873?

W. J. DAVIS, 1st.

Robertson Co., Pa., Dec. 22.

Fine Weather—Honey Scarce.

The weather is fine so far but dry. There is not much hope for white clover in this part of the country. Honey is scarce now, and prospects are for better prices. A. A. Houser.

McDonough Co., Ill., Dec. 15.

Honey-Producers' Association Collapsed.

At a meeting of the stockholders of the Central California Honey-Producers' Association, held at Hanford last Monday, it was decided to disincorporate the organization. The cause of this move can not be accounted for in any other way than to say that there was a lack of confidence in the management. The condition of the business for the past year looked bad, and the stockholders did not want to take a chance at being run seriously into

debt another year. At any rate, the benefits received from the organization were very slim. The collapse of the association is of no credit to the man who held the position of manager.—Kingsbury [Calif.] Recorder, Dec. 14, 1904.

CONVENTION NOTICES.

Wisconsin.—The Wisconsin State Bee-Keepers' Association will meet in the Supervisor's Room in the Court House, at Madison, Feb. 1, 1905. All bee-keepers are invited to attend.—Augusta, Wis.

GUS DITTMER, Sec.

New York.—The Jefferson County Bee-Keepers' Society and New York State Association will hold their meeting in the City Hall, Watertown, N. Y., Jan. 17 and 18, 1905. The general manager, N. E. France, and other prominent bee-keepers, are expected to speak.—Black River, N.Y. GEORGE B. HOWE, Sec.

New York.—A bee-keepers' institute, under the auspices of the Bureau of Farmers' Institutes of the State of New York, will be held at Fulton, N.Y., Monday, Jan. 16, 1905. Mr. N. E. France has been engaged by the Department of Agriculture, as speaker. The annual business meeting of the Oswego County Bee-Keepers' Association will be held at the same time and place.—CHAS. B. ALLEN, Sec., Central Square, N. Y.

MORTIMER STEVENS, Pres.

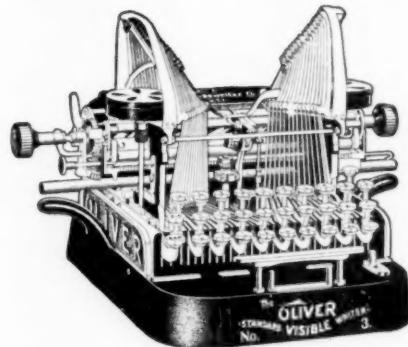
New York.—The Fulton and Montgomery Counties Bee-Keepers' Society will hold the next meeting at Amsterdam, N. Y., Thursday, Jan. 19, 1905, in connection with a bee-keepers' institute. Arrangements have been made with F. E. Dawley, Chief of the Bureau of Institutes, to furnish Mr. N. E. France, General Manager of the National Association, as the principal speaker, and all are cordially invited to come. This will also be the annual business meeting of the society.—T. I. DUGDALE, Sec.

West Galway, N. Y.

New York.—A series of bee-keepers' meetings have been arranged for in this State, as follows: Syracuse, Jan. 15; Watertown, Jan. 17, 18; Romulus, Jan. 11; Cortland, Jan. 13; Fulton, Jan. 16; Amsterdam, Jan. 19. Mr. N. E. France, the general manager of the National Bee-Keepers' Association, has been engaged to address the meetings, by the State Department of Agriculture, through the Bureau of Farmers' Institutes, F. E. Dawley, Director. The convention at Watertown, Jan. 18, will be the meeting of the State Association, at which many of the

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States are expected to be present and take part
in the discussions.

C. A. HOWARD, Sec. W. F. MARKS, Pres.

Nebraska.—The annual meeting of the
Nebraska Bee-Keepers' Association will be held at
the Experiment Station at Lincoln, on Monday,
Jan. 16, 1905, at 2 p.m. Will you be there and
favor us with a paper along the lines of bee-
keeping in which you are particularly interested?
It is hoped that Ernest R. Root will be
present for a good talk. Headquarters will be
at The Windsor Hotel, where cheap rates have
been secured. This will be one of the first
meetings in the weeks' series; let us have a good
one.

L. D. STILSON, Sec., York, Nebr.

E. WHITCOMB, Pres.

Michigan.—The Michigan State Bee-Keepers'
Association will hold its annual convention
Feb. 23d and 24th, at the Eagle Hotel in Grand
Rapids. The Eagle Hotel is located at 65 to 71
Market St., cor. of Lewis St., one block south
of Monroe St. It will give a rate of \$1.50 per
day, and furnish a room free for holding the
convention. The Michigan State Dairymen's
Convention will meet in Grand Rapids at the
same time, and advantage may be taken of this
fact to secure reduced rates on the railroads.
When buying your ticket, ask for a certificate
on account of the Dairymen's Convention. The
secretary of the Dairymen's Association will
sign this certificate which will then enable the
holder to buy a return ticket for one-third fare.
Several associations often thus meet at the
same time and place, the secretary of one association
signing the certificates for all of the associations,
the same being done with the knowledge and consent of the railroads—it simplifies
matters. Grand Rapids is the second largest
city in the State, easily accessible from the
north, south, and central parts of the State, in
the heart of a good bee-country, and, with the
low rates assured, there should be a large
crowd in attendance.

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Honey and
BeeswaxCHICAGO, Dec. 7.—The market is well supplied
with all kinds of honey; the demand is of a
light nature. Fancy comb honey brings 14c,
but quality as well as appearance is necessary;
No. 1 sells at 12@13c; off grades difficult to
move at 10@13c less. Extracted, choice white,
7@7.5c; amber, 6@7c, with off grades about 5c
per pound. Beeswax, 30c.

R. A. BURNETT & CO.

NEW YORK, Dec. 7.—Receipts of late have
been quite heavy, and while there has been a
fair demand, it has not been up to former years
and stocks are somewhat accumulating, conse-
quently prices show a tendency to decline, and in
large lots quotation prices as a rule are
shaded. We quote fancy white at 14@15c; No.
1 white at 12@13c; amber, 11c; buckwheat, 10c.
Extracted in fair demand at 6@6.5c for white
clover; 5c for buckwheat; 50@60c per gallon
for Southern, according to quality. Beeswax
firm at 28@29c.

HILDRETH & SEGELEN.

KANSAS CITY, Dec. 30.—The best comb honey
is selling at \$2.25 per case of 24 sections, and
the demand for same is very slack. Extracted
is moving fairly well, fancy stock selling at
6@7c. We look for the market on comb honey to
improve shortly after the first of the year,
as the dealers will have the stock that they
bought for the holiday trade about cleaned up.
Beeswax in good demand at 30c.

C. C. CLEMONS & CO.

PHILADELPHIA, Dec. 24.—As usual around the
holidays, there is not much call for either comb
or extracted honey. Prices remain about the
same as the last quotations. Some odd lots
having arrived in the market in the last 10 days
weakened the price of lower grades. Fancy
white comb, 15@16 cents; No. 1, 13@14c; amber,
11@12c. Extracted, white, 7@8c; amber, 6@7c.
Beeswax, 26c.We are producers of honey and do not handle
on commission.

WM. A. SELSER.

BOSTON, Dec. 22.—During the honey season
the honey demand has been practically at a
stand-still. Stocks seem to accumulate rather
than to diminish. While prices are practically
as per our last, yet on the whole, the tendency
seems to be to a lower level. Our market to-
day is practically as follows: Fancy white,
10c; A No. 1, 15c; No. 1, 14c, with practically no
demand for No. 2. Extracted, from 6@8c, ac-
cording to quality.

BLAKE, SCOTT & LEE.

CINCINNATI, Dec. 30.—Since our last report
was published, the price of extracted honey has
advanced, no doubt acting in sympathy withthe sugar market. We quote amber extracted
in barrels at 6@6.5c; white clover, in barrels
and cans, 6@6.5c. Fancy comb honey, 13@14c.
Beeswax, 28c.

THE FRED W. MUTH CO.

ALBANY, N.Y., Dec. 26.—Comb honey is mov-
ing off very well considering the heavy re-
ceipts and cold weather. Prices not as high
as early fall, as usual, but very good yet.
Fancy white, 14@15c; No. 1, 13c; mixed, 12@13c.
Buckwheat, 11@12c; mixed, 10@11c. Extracted,
dark, 6@6.5c; light, 6@7c. Beeswax, 28@30c.

H. R. WRIGHT.

CINCINNATI, O., Dec. 19.—Comb honey is now
coming in more freely, and prices if anything
have moderated a little. The sales made and
prices obtained were for No. 1 fancy water-
white comb, 12@13c; single cases, 14c. Ex-
tracted is sold as follows: White clover, in
barrels, 6@6c; in cans, 7@8c; amber, in barrels,
5@5.5c; in cans, 6@6.5c. Beeswax, 27c.
C. H. W. WEBERSAN FRANCISCO, Dec. 28.—White comb, 1-lb.
sections, 11@12c; amber, 11c. Extracted
white, 6@6.5 cents; light amber, 4@5.5c; am-
ber, 3@4.5c; dark amber, 3@3.5c. Beeswax,
good to choice, light, 29@30c; dark, 27@28c.There are no heavy quantities offering of
either comb or extracted, but more than imme-
diate custom can be found for at prevailing
values. The demand at present is very light
and is mostly local.

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